

CLAIMS

1. An electrically conductive paste comprising main components including a metal powder, a glass frit, and an organic vehicle, wherein
5 the metal powder comprises spherical particles (A) having an average primary-particle diameter of 0.1 to 1 μm and spherical particles (B) having an average primary-particle diameter of 50 nm or less, and the content of spherical particles (A) is in the range of 50 to 99 wt% and the content of spherical particles (B) is in the range of 1 to 50 wt%; and
10 the content of the glass frit is in the range of 0.1 wt% to 15 wt% to the total amount of the glass frit and the metal powder.
2. An electrically conductive paste according to claim 1, wherein the content of the glass frit is 0.1 wt% or more and less than 1 wt% relative to the total amount of the glass frit and the metal powder.
- 15 3. An electrically conductive paste according to claim 1, wherein the content of the glass frit ranges from 1 wt% to 15 wt% to the total amount of the glass frit and the metal powder.
4. An electrically conductive paste according to any one of claims 1 to 3, wherein the metal powder is composed of the spherical particles (A) of 90 to 97
20 wt% and the spherical particles (B) of 3 to 10 wt%.
5. An electrically conductive paste according to any one of claims 1 to 4, wherein the metal powder is at least one metal or an alloy selected from the group consisting of platinum, gold, silver, copper, nickel, and palladium.

6. An electrically conductive paste according to any one of claims 1 to 5, wherein the glass frit does not contain lead.

7. An electrically conductive paste according to any one of claims 1 to 6, wherein the working point of the glass frit is 500°C or less.

5 8. An electrically conductive paste according to any one of claims 1 to 6, wherein the working point of the glass frit is 450°C or less.

9. An electrically conductive paste according to any one of claims 1 to 8, wherein the glass frit is a powder having an average particle diameter of 2 μm or less.